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Department of Master of Computer Applications

20MCA 36 - Minor Project – Phase II Review

e-Resources Website for Rvce Using SOA

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Under the Guidance

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Agenda

- Incorporation of Suggestions of previous review
- Objectives
- Functional Requirements (Modules description)
- Non-functional Requirements (Relevant to the project)
- Architectural Design
- Modules identified
- System Design
- Implementation

Objectives

- Collecting the Resources from main library
- Creation of web application using SOA Pattern
- Performing CRUD operation on the resources through the web application.

Functional Requirements

- Module Specification

  Frontend Module

  - Input - Interface for downloading resources
  - Process - Fetching the file from Database to the download module
  - Output - Displaying the downloaded file to the Student.

Functional Requirements

- Module Specification

  Backend Module

  - Input – Admin providing resources .
  - Process – Uploading the resources on the database.
  - Output - Displaying the resources on the user interface.

Non Functional Requirements

Availability :

Resources will be 24/7 available on the website

Security :

Only valid user will be having access to login and access the resources.

Maintainability:

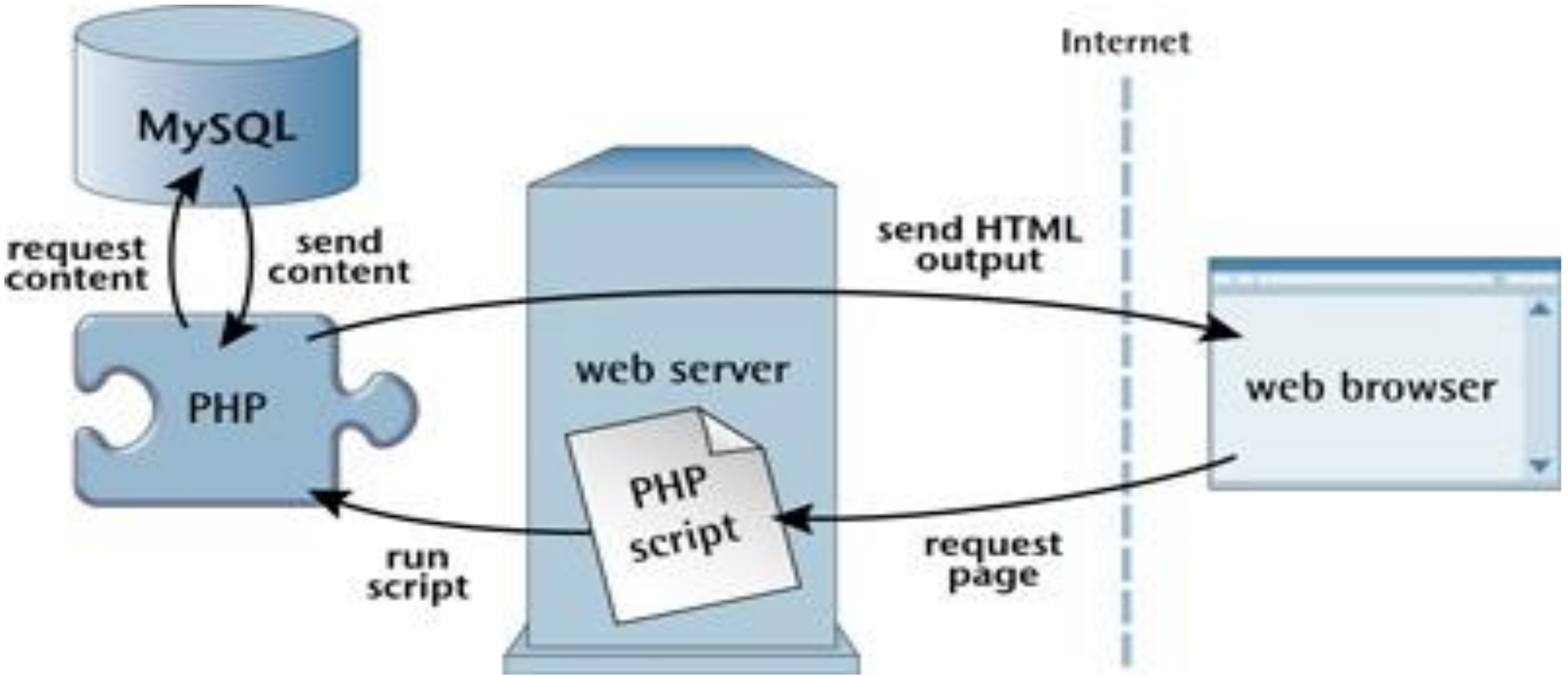
Its easy to maintain the resources.

Non Functional Requirements

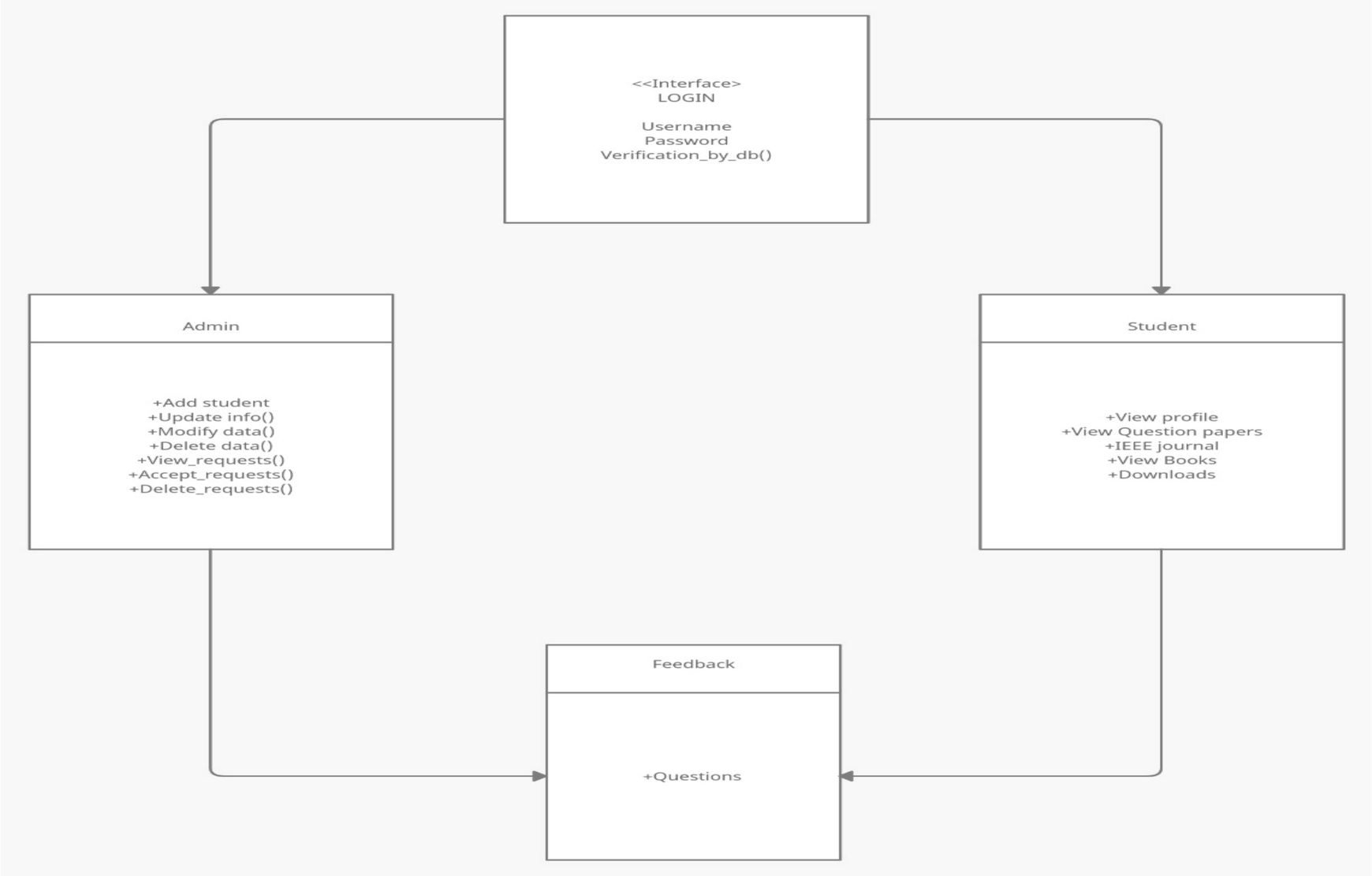
Safety :

Students authentication will not be shared to others.

Architectural Design

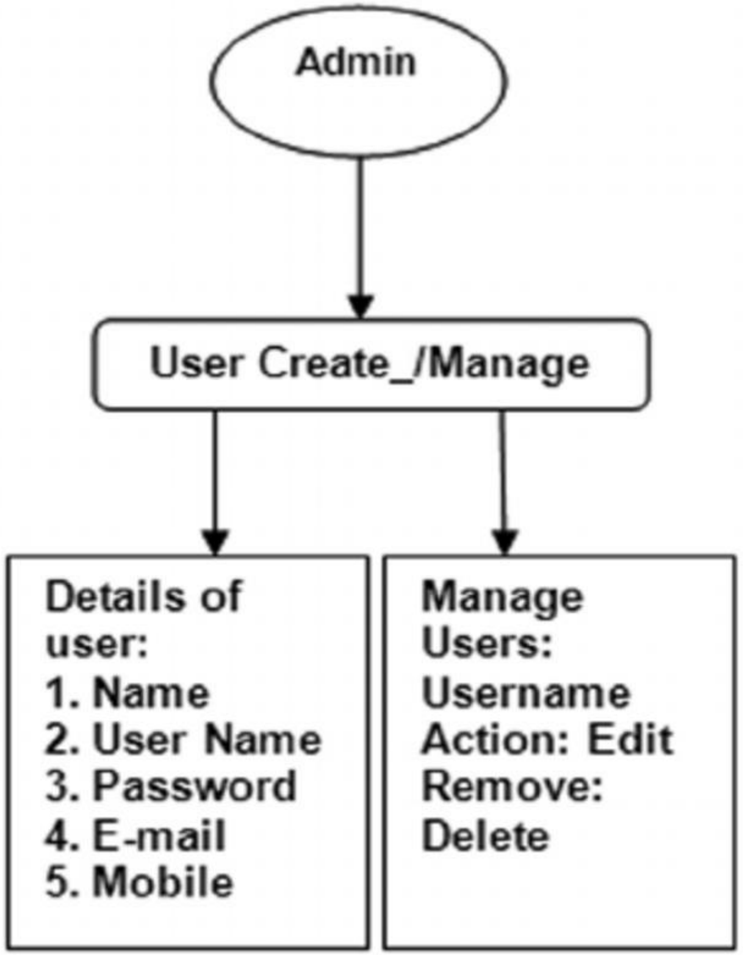


UML diagram


<<Interface>>
LOGIN
Username
Password
Verification_by_db()
Admin
+Add student
+Update info()
+Modify data()
+Delete data()
+View_requests()
+Accept_requests()
+Delete_requests()
Student
+View profile
+View Question papers
+IEEE journal
+View Books
+Downloads
Feedback
+Questions

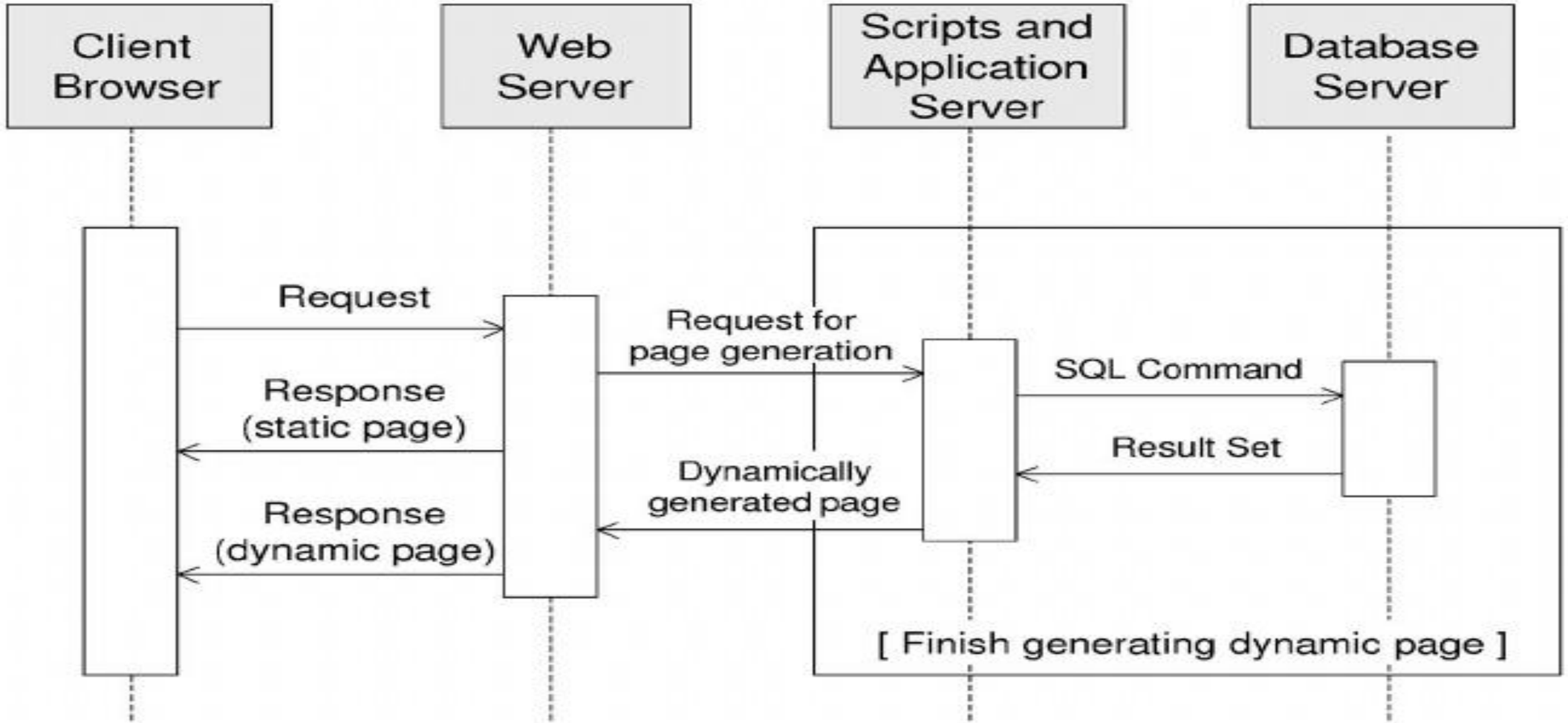
Functional Modeling

Data flow diagram

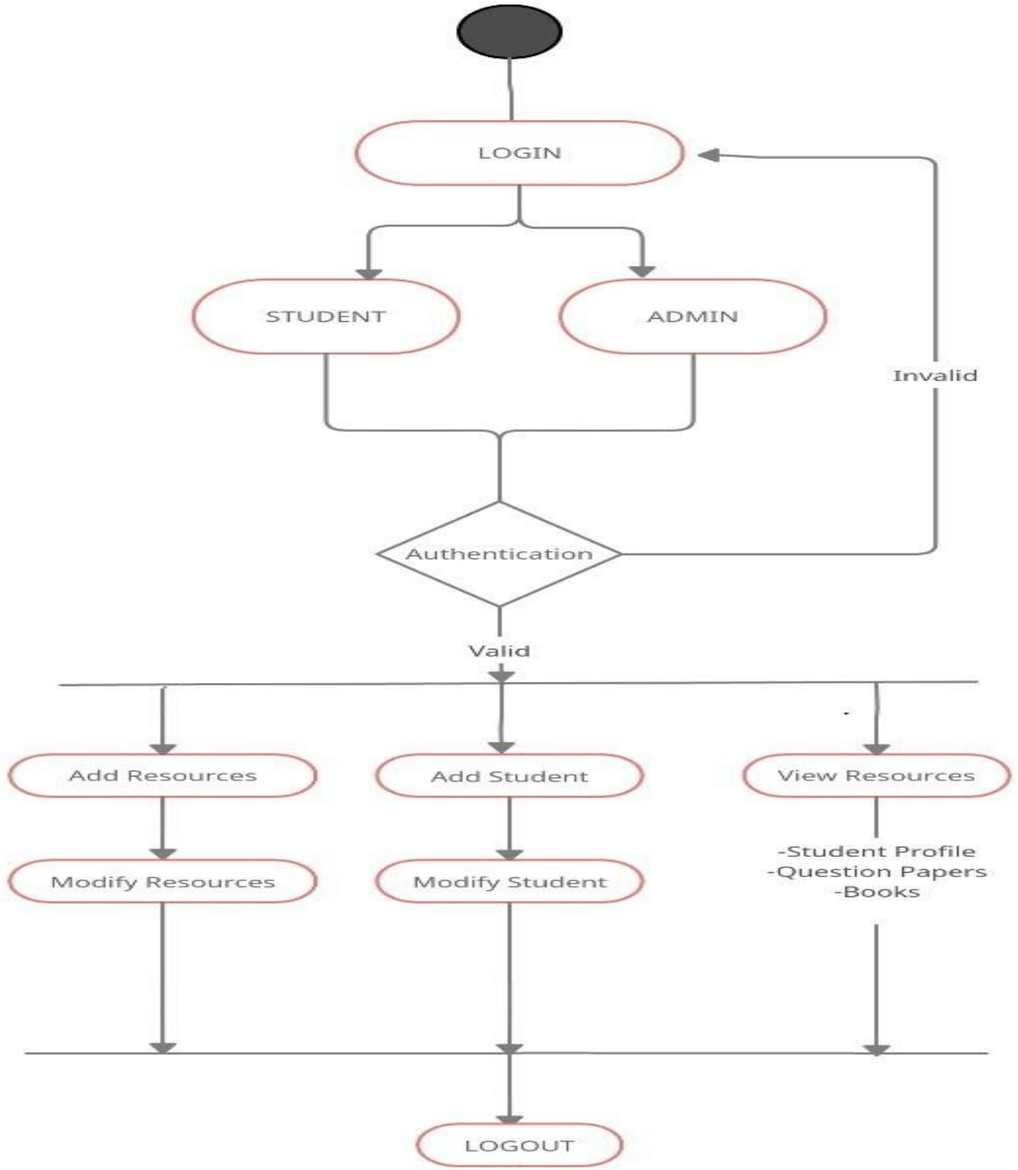


System Design

Sequence diagram



Activity diagram

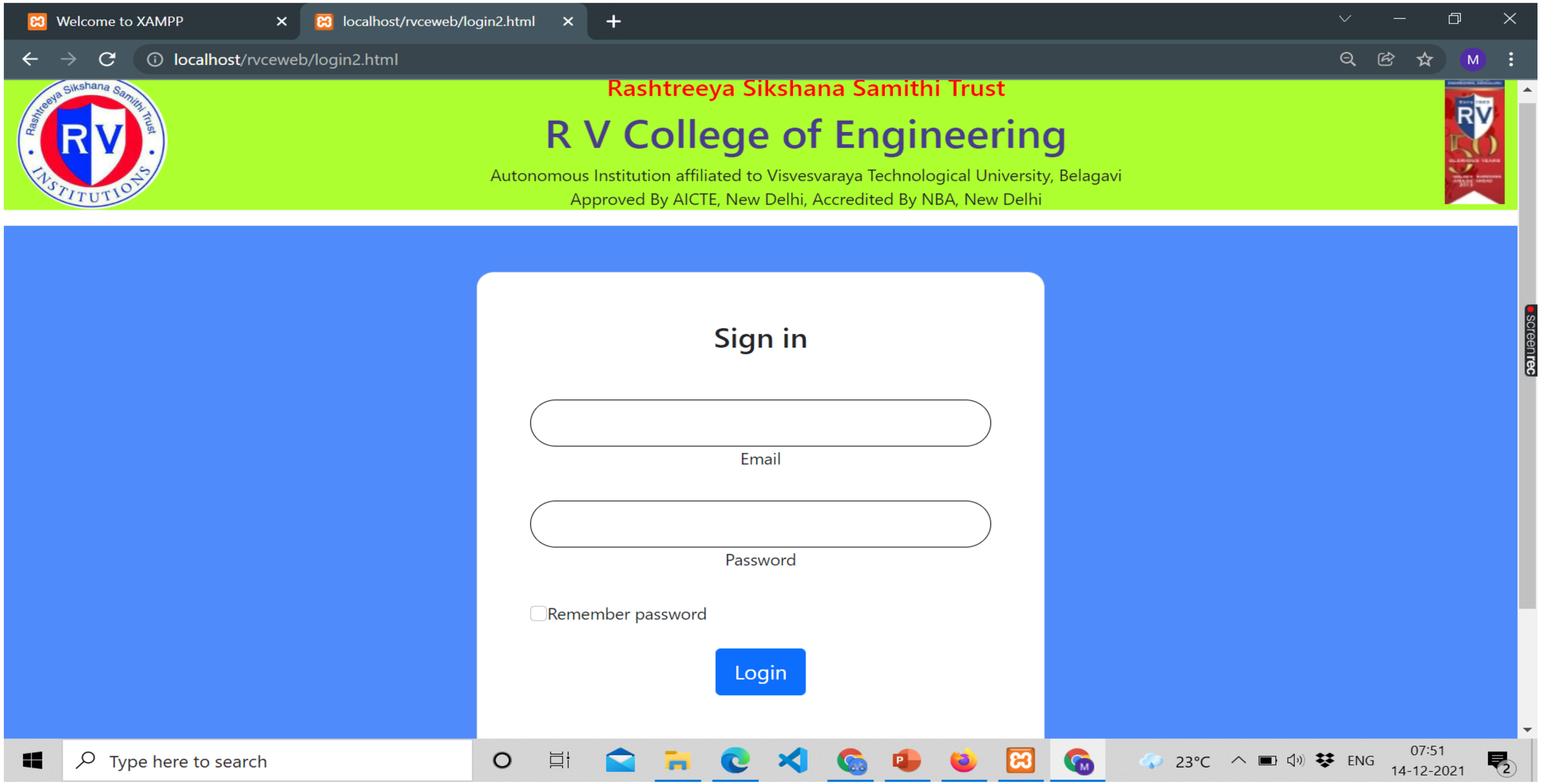


Implementation

- Resources has been collected.
- A Graphical User Interface has been created for user.
- Database has been connected to user interface.

Implementation

Implementation



References

1. Kumari, Punam, and Rainu Nandal. "A Research Paper On Website Development Optimization Using Xampp/PHP." International Journal of Advanced Research in Computer Science (2017), Vol 8.5 pp1231-1235.

2. Pirnau, C. and Botezatu, M.A., 2016. Service-Oriented Architecture (SOA) and Web Services. *Database Systems Journal BOARD*, p.32.

3. López-Gorozabel O, Cedeño-Palma E, Pinargote-Ortega J, Zambrano-Romero W, Pazmiño-Campuzano M. Bootstrap as a Tool for Web Development and Graphic Optimization on Mobile Devices. InXV Multidisciplinary International Congress on Science and Technology 2020 Oct 19 :pp. 290-302.

4. Dragoni N, Giallorenzo S, Lafuente AL, Mazzara M, Montesi F, Mustafin R, Safina L. Microservices: yesterday, today, and tomorrow. Present and ulterior software engineering. 2017: pp:195-216

References

5. Feljan, Aneta Vulgarakis, Swarup Kumar Mohalik, Mahesh Babu Jayaraman, and Ramamurthy Badrinath. "SOA-PE: a service-oriented architecture for planning and execution in cyber-physical systems." In *2015 International Conference on Smart Sensors and Systems (IC-SSS)*, IEEE, 2015, pp. 1-6.

6. Macaulay, Michael. *Introduction to web interaction design: With HTML and CSS*. Chapman and Hall/CRC, 2017. eBook ISBN 9781315692333.

7. Satoto, K.I., Isnanto, R.R., Kridalukmana, R. and Martono, K.T., 2016, October. Optimizing MySQL database system on information systems research, publications and community service. In *2016 3rd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE)* (pp. 1-5).

References

8 . Surjandari, I., Rachman, A., Panjaitan, Y. A. B., & Rosyidah, A. (2017, October). Development of theses categorization system search engine using PHP and MySQL. In *2017 International Conference on Information Technology Systems and Innovation (ICITSI),IEEE*, (pp. 194-199).

9 . Pirnau, C. and Botezatu, M.A., 2016. Service-Oriented Architecture (SOA) and Web Services. *Database Systems Journal BOARD*, p.32.

10 . Korotun, Olha, Tetiana Vakaliuk, and Viacheslav Oleshko. "Development of a web-based system of automatic content retrieval database." *Available at SSRN 3719834* (2020).

11 . Lopez, Daniel Andres Pelaez. "Requirement Analysis for Your Full-Stack Web Application." *Full-Stack Web Development with Jakarta EE and Vue. js*. Apress, Berkeley, CA, 2021. 111-142.